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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/844,537	04/27/2001	Robert W. Baxter	9266-2	3743

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EXAMINER

CORRIELUS, JEAN M

ART UNIT

PAPER NUMBER

2162

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/844,537

Applicant(s)

BAXTER ET AL.

Examiner

Jean M. Corrielus

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 12-16 and 23-27 is/are rejected.
- 7) ☒ Claim(s) 6-11, 17-22, 28-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed on September 16, 2005, in which claims 1-33 are presented for further examination

Response to Arguments

2. Applicant's arguments filed on September 16, 2005 have been fully considered but they are not persuasive. (See Examiner's remark).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 12-16 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eidson US Patent no. 5,923,557 and Srinivasan et al., (hereinafter "Srinivasan") US Patent no. 6,823,336.

As to claims 1, 12 and 23, Eidson discloses the claimed limitations "storing a command for the controller in a database, wherein the command is selected from a group of commands consisting of a write command that is configured to write a value of a real-time process control variable to the controller and read command that is configured to read a value of a real time process control variable from the controller" as a means wherein the information in the database includes a set of device specific information for each of the process control devices detected by

Art Unit: 2162

the mapping processor, where such device specific information for a particular process control device contains information such as the number of variables associated with the process control device, the triggering requirement, wherein in general, each variable associated with a process control device maps to a channel (col.4, lines 55-65). Eidson does not explicitly state that the use of detecting the stored command in the database. However, the device-specific information stored in the database 32 as disclosed by Eidson contains a set of device specific information (commands) that is detected by the mapping processor 30. Such mapper use as a protocol in helping to detect the commands stored in the database, col.4, lines and 55-58). Eidson discloses also the use of “sending the detected command to the controller” as a way of passing the information to the mapping processor which has stored into the database to the controllers (see items 60, 61 and 62; and col.6, lines 3-32). On the other hand, Srinivasan discloses the use of detecting the stored command in the database (col.7, lines 3-12). Therefore, it would have been obvious to one of ordinary skill in the art of data processing, at the time the present invention was made to modify the teachings of cited references, wherein the process control system, provided therein (See Edison’s fig.3) would be more explicit detail the use of detecting the commands stored into the database without using the mapping processor as disclosed by Eidson (col.4, lines 55-58). One having ordinary skill in the art at the time the invention was made would have found it motivated to utilize such a modification because that would provide Edison’s system the enhanced capability of enabling the application controller to communicate with the process control to automatically detect the device specific information into the database, thereby decreasing the difficulty and cost of maintaining the process control system

Art Unit: 2162

As to claims 2, Eidson discloses the claimed limitation “verifying that the stored command is a valid command for the controller” as obtaining information such as the triggering requirement (col.5, lines 22-29).

As to claims 3, Eidson discloses the claimed limitations “sending a write command that is configured to write a first value of a first real-time process control variable to the controller” by writing the interface specific configuration information in the device oriented interface database with appropriate values (col.5, lines 15-20); and “sending a read command that is configured to write a first value of a first real-time process control variable to the controller responsive to sending the write command that is configured to write the first value of the first real time process control variable to the controller” as reading the device specific information from the device dictionary and writing it to appropriate entries in the device oriented interface database (col.5, lines 43-47).

As to claims 4, Eidson discloses the claimed limitations “receiving a response from the controller responsive to sending the retrieved command to the controller” (col.6, lines 1-7); and “updating a status of the retrieved command sent to the controller in a command table in the database to indicate whether the retrieved command sent to the controller succeeded or failed” as updating the dictionary server attached to field bus as new process control device become available or modified in term of device specific information (col.5, lines 61-64).

Art Unit: 2162

As to claims 5, Eidson discloses the claimed limitation “updating the current value associated with the first real time process control variable in a tag in the table in the database with the first real time process control variable read from the controller responsive to receiving the response from the controller” as updating the dictionary server attached to field bus as new process control device become available or modified in term of device specific information (col.5, lines 61-64).

As to claims 13-16:

Claims 13-16 are for system claims performing the methods of claims 2-5. They are similarly rejected.

As to claims 24-27

Eidson has computer program embedded in the computer can be used to performed Claims 24-27 are for computer readable medium containing instructions performed by the methods of claims 2-5. They are similarly rejected.

Allowable Subject Matter

5. Claims 6-11, 17-22 and 28-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reason for Indicating Allowable Subject Matter

6. The present application has been thoroughly reviewed. Upon extensive and exhaustive searches of various databases (see search notes in case jacket), the examiner respectfully submits that the claimed feature --providing a tag table in the database that comprises definitions of a plurality of real time process control variables, wherein each of the plurality of real time process control variables is associated with a monitoring frequency and a current value; periodically sending a read command that is configured to read a value of a real-time process control variable for respective ones of the plurality of real time process control variables from the controller based on the respective monitoring frequencies; and updating the respective current values for respective ones of the plurality of real time process control variables with the respective values of the real time process control variables read from the controller-- in the method, system and computer program of claims 6, 17 and 28 respectively and in conjunction with all other limitations of the dependent and independent claims would not found anticipated or obvious over the prior art made of record.

Remark

(A). Applicant asserted that Eidson does not detect the stored command in the database and sending the detected command to the controller. The examiner disagrees with the precedent assertion. However, when read and analyzed in the light of the specification, the invention as claimed does not support applicants' assertion. Moreover, the claims do not capture the essence of the invention as argued in applicants' remark pages 13-15. It is important to note that applicants are interpreting the claims very narrow without considering the broad teachings of the

Art Unit: 2162

reference used in the rejection. In the last office action, the examiner went through the claims phrase by phrase and referred to the prior art column and line number as to where he has drawn the correspondences between applicants' claims phrases and prior art. It is respectfully submitted that Eidson discloses a system to provides a standard interface to process control devices (col.1, lines 9-11). In particular, Eidson discloses a controller (PLC) connected to one or more process control device via one of the different types of field buses. Such Controller includes a processor that executes a set of application code for communicating with and controlling the corresponding process control devices (col.9, lines 46-55). Such standard interface is provided by a mapper, which includes a means for obtaining a set of information pertaining to the process control device where the information describes the process control device (col.9, lines 58-67), similarly to the description provided by applicant' specification page 6, fig.3. The device oriented interface database facilitates communication between clients and one or more controller, wherein the controller is a device used to monitor and control internal and external components with the central processing unit. More specifically, the mapper provides application controllers with a standardized interface for setting up peer-to-peer communication among the process control devices. Applicant should duly note, the mapper processor when building the database allocates channel from the application controller to the mapper for use in writing configuration information to the process control devices for use peer-to peer communication, wherein the application controller transfer the configuration data through the channel and the mapping processor in turn writes the configuration data to the process control device (col.7, lines 18-28), and wherein the mapper builds a set of information pertaining to each of the process control devices and builds a set of configuration information into the interface database, such

Art Unit: 2162

configuration information includes device specific information and interface specific (col.4, lines 27-47). Moreover, the device specific information for the controller is stored in database 32 to allow the controller to be monitored or controlled by sending commands to the controllers (col.5, lines 55-67). Upon request the mapping processor reads the device specific information from the device dictionary and write it to appropriate entries in the interface database, the device specific information in the database includes a set of device information for each of the process control devices detected by the mapping processor (col.4, lines 55-62). Eidson discloses the claimed limitations “storing a command for the controller in a database, wherein the command is selected from a group of commands consisting of a write command that is configured to write a value of a real-time process control variable to the controller and read command that is configured to read a value of a real time process control variable from the controller” as a means wherein the information in the database includes a set of device specific information for each of the process control devices detected by the mapping processor, where such device specific information for a particular process control device contains information such as the number of variables associated with the process control device, the triggering requirement, wherein in general, each variable associated with a process control device maps to a channel (col.4, lines 55-65). Eidson does not explicitly state that the use of detecting the stored command in the database. However, the device-specific information stored in the database 32 as disclosed by Eidson contains a set of device specific information (commands) that is detected by the mapping processor 30. Such mapper use as a protocol in helping to detect the commands stored in the database, col.4, lines and 55-58). Eidson discloses also the use of “sending the detected command to the controller” as a way of passing the information to the mapping processor which

Art Unit: 2162

has stored into the database to the controllers (see items 60, 61 and 62; and col.6, lines 3-32).

Eidson clearly discloses the invention as claimed. Hence the 35 U.S.C 103 is hereby sustained.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

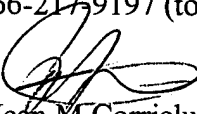
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2162

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean M Corrielus
Primary Examiner
Art Unit 2162

December 9, 2005